ABSTRACT

The present invention aims to provide apparatus and method for determining non-circular figure to drill boring holes having a regular N-polygonal cross sections while retaining the advantage of the turning operation.

For boring a boring hole (H) with a cross-sectional shape of a regular N-polygon having vertexes of N in number, a boring tool (T) having a cross-sectional shape of a regular (N-1)-polygon which is inscribed on the regular N-polygon of the boring hole is driven to rotate at a certain rotational speed around its center (G) and revolve at a certain revolving speed along a circle (R) which is concentric to the boring hole center (O) and has a certain radius. The boring tool (T) may be replaced with a jet of fluid. A boring tool (T) with a regular (N+1)-polygonal contour may be used instead.